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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,369	06/29/2001	Juan J. Silva	4740-008	2220

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EXAMINER

TRINH, TAN H

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 05/13/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,369

Applicant(s)

SILVA ET AL.

Examiner

TAN TRINH

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13, 18, 23, 25, 30, 33 and 38 is/are rejected.
- 7) ☒ Claim(s) 14-17, 19-22, 24, 26-29, 31, 32, 34-37 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4, 5, 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 06-29-2001, 01-10-2002 and 03-03-2003 has been received and placed of record in the file.

Allowable Subject Matter

2. Claims 1-12 are allowed.
3. Claims 14-17, 19-22, 24, 26-29, 31-32, 34-37 and 39, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for allowance

4. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the references of Ishikawa (U.S. Patent No. 5,838,671), Baum (U.S. Patent No. 6,385,462) teaches a method of simulating call admission in a wireless communications network (see col. 9, lines 30-67 and col. 10, lines 1-6), the method comprising: defining a plurality of candidate subscriber units (see col. 5, lines 48-67). However, Ishikawa or Baum and the prior art of record fail to teach, the method comprising: defining a radio base station in a simulation environment; defining two or more categories of subscribers; defining a plurality of candidate subscriber units associated with said radio base station in said simulation environment, each said candidate subscriber unit associated with one of said subscriber

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categories; determining a total forward link power available to said base station for transmitting signals to said candidate subscriber units; performing a call admission procedure to randomly admit candidate subscriber units for service from said base station, said call admission procedure comprising, for each candidate subscriber unit; determining the unallocated total forward link power; determining the additional power requested by the candidate subscriber unit; determining the available power for a corresponding subscriber category; and admitting said candidate subscriber unit if the additional power requested by the candidate subscriber unit is within the limits of the unallocated total forward link power and the available power for the corresponding subscriber category, as cited in claim 1.

Regarding claims 14, 26, 31 and 34, the prior art of record fail to teach, the recomputing the available power for the corresponding subscriber category and the unallocated total forward link power when a subscriber unit is admitted.

Regarding claims 15 and 35, the prior art of record fail to teach, wherein determining the available power for a corresponding subscriber category comprises: determining a power threshold for the subscriber category; determining the total power previously allocated to other subscriber units in the corresponding category; and determining the available power by subtracting the previously allocated power to all subscribers in the corresponding category from the power threshold.

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Regarding claim 19, the prior art of record fail to teach, the method of claim 18 wherein the power threshold for said voice users prior to beginning said call admissions procedure is equal to the total forward link power.

Regarding claim 20, the prior art of record fail to teach, the method of claim 18 wherein the power threshold for said voice users prior to beginning said call admissions procedure less than the total forward link power.

Regarding claim 21, the prior art of record fail to teach, the method of claim 18 wherein the power threshold for said data users prior to beginning said call admissions procedure is equal to the total forward link power.

Regarding claim 22, the prior art of record fail to teach, the method of claim 18 wherein the power threshold for said data users prior to beginning said call admissions procedure less than the total forward link power.

Regarding claims 24 and 39, the prior art of record fail to teach, wherein determining the additional power requested by the candidate subscriber unit comprises recomputing the additional power at a fallback data rate if the additional power required at the desired data rate exceeds the available power for the corresponding subscriber category

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Regarding claim 27, the prior art of record fail to teach, the method of claim 25 further comprising recomputing the available power for data users when a data user is admitted.

Regarding claim 28, the prior art of record fail to teach, the method of claim 25 further comprising: defining an power reserve for serving data users; defining an available power for serving voice users based on said power reserve for data users; and excluding a voice user when the additional power required by said voice user exceeds the available power for voice users.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13-18, 23, 33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa (U.S. Patent No. 5,838,671) in view of Baum (U.S. Patent No. 6,385,462).

Regarding claims 13 and 33, Ishikawa teaches a method of simulating call admission in a wireless communications network (see col. 9, lines 30-67 and col. 10, lines 1-6), the method comprising: defining a plurality of candidate subscriber units (see col. 5, lines 48-67), each the candidate subscriber unit associated with one of a plurality of subscriber categories (see col. 6, lines 13-67). But Ishikawa fails to teaches the determining a total forward link power available for transmitting signals to said candidate subscriber units; determining the additional power requested by the candidate subscriber unit; and admitting successive ones of said candidate

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subscriber units in a determined order if, for each candidate subscriber unit, the additional power requested by the candidate subscriber unit is within the limits of an unallocated total forward link power and an available power for a corresponding subscriber category.

However, Baum teaches the determining a total forward link power available for transmitting signals to the candidate subscriber units (see fig. 1, col. 9, lines 60-col. 10, line 7); determining the additional power requested by the candidate subscriber unit (see col. 9, lines 1-10); and admitting successive ones of the candidate subscriber units in a determined order if, for each candidate subscriber unit, the additional power requested by the candidate subscriber unit is within the limits of an unallocated total forward link power and an available power for a corresponding subscriber category (see col. 9, lines 12-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Ishikawa system and by the teaching of Baum on the total power and excess power technique thereto in order to provide the power for new user to admitted the network.

Regarding claim 18, Ishikawa teaches wherein the subscriber categories include voice users and data users (see col. 3, lines 10-25, and col. 6, lines 1-12). And this is well known in the art the CDMA mobile communication system, the system service include voice users and data users.

Regarding claims 23 and 38. Baum teaches wherein determining the additional power requested by the candidate subscriber unit comprises determining the additional power required by the subscriber unit at a desired data rate (see col. 3, line 54-col. 4, line 25).

7. Claims 25 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa (U.S. Patent No. 5,838,671) in view of Baum (U.S. Patent No. 6,385,462) further in view of Gopalakrishnan (U.S. Pub. No. 20020183064).

Regarding claims 25 and 30, Ishikawa teaches a method of simulating call admission in a wireless communications network having a mix of subscriber units including both voice users and data users (see col. 9, lines 30-67 and col. 10, lines 1-6 and col. 3, lines 10-25, and col. 6, lines 1-12), But Ishikawa fails to teach the method comprising: determining a total forward link power available for serving the candidate subscriber units; defining an power reserve for serving voice users; defining an available power for serving data users based on said power reserve for voice users; admitting successive ones of said candidate subscriber units in a determined order if, for each candidate subscriber unit, the additional power required by said subscriber unit is within the limits of an unallocated total forward link power; and excluding a data user when the additional power required by said data user exceeds the available power for data users.

However, Baum teaches the method comprising: determining a total forward link power available for serving the candidate subscriber units (see fig. 1, col. 9, lines 60-col. 10, line 7); admitting successive ones of the candidate subscriber units in a determined order if, for each candidate subscriber unit, the additional power required by the subscriber unit is within the limits

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of an unallocated total forward link power (see col. 9, lines 12-53). But Baum also fails to teach the defining an power reserve for serving voice users; defining an available power for serving data users based on the power reserve for voice users and excluding a data user when the additional power required by the data user exceeds the available power for data users.

However, Gopalakrishnan teaches the defining an power reserve for serving voice users (see page 1, session [0006] and session [0010]), defining an available power for serving data users based on the power reserve for voice users and excluding a data user when the additional power required by said data user exceeds the available power for data users (see session [0005 and session [0010]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Ishikawa and Baum system and by the teaching of Gopalakrishnan on voice users and a data user technique thereto in order to provide the power for both voice and data user to admitted the network.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Greenberg (U.S. Patent No. 5,878,026) discloses resource sharing for book-ahead and instantaneous-request calls.

Chmaytelli (U.S. Patent No. 5,878,026) discloses method and apparatus for adapting capabilities of a wireless communication system to load requirements.

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9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (703) 305-5622. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

Tan H. Trinh
Art Unit 2684
May 11, 2004


NICK CORSARO
PATENT EXAMINER